corresponding to the attention pattern obtained as the sample and a conversion method to the representative attention pattern.

In the next step S112, the information conversion means 302 uses the group conversion table shown in Fig. 42 to convert the group pattern to a representative group pattern according to the conversion method searched for in step S111.

With these steps S111 and S112, the representative attention pattern and the representative group pattern are obtained for the one obtained sample.

In the next step S113, the representative-frequency-table generating means 303 registers the obtained representative attention pattern and the obtained representative group pattern into the representative frequency table shown in Fig. 43. In other words, the cell corresponding to the current sample is incremented by one.

In step S114, it is determined whether the processing has been finished for all samples. When the processing has not yet been finished, the information obtaining means 301 obtains the next sample of an attention pattern and a group pattern in step S115, the processing returns to step S111, and the same processes as described above are performed.

Therefore, when the processes of steps S111, S112, and S113 have been finished for all samples, the representative frequency table shown in Fig. 43 has been completed.

Next, the representative-group determination table shown in Fig. 44 is generated from the representative frequency table generated as described above.

The representative-group determination table indicates the representative group pattern corresponding to each representative attention pattern. A representative attention pattern in each entry (row) is the same as that shown in the representative frequency table.

The representative-group determination table is generated by registering, as the representative group pattern corresponding to each representative attention pattern, the representative group pattern having the highest frequency for each representative attention pattern among representative group patterns. Fig. 49 shows the specific procedure of generating the table.

The representative-group-determination-table generating means 304 obtains a first entry of the representative frequency table generated by the representative-frequency-table generating means 303 in step S120. In step S121, the representative-group-determination-table generating means 304 determines the representative-group pattern having the highest frequency for the representative attention group in the obtained entry, and registers it to the representative-group determination table.

In the representative frequency table shown in Fig. 43,

for example, the frequencies of representative group patterns are indicated for a representative attention pattern of (0, 0, 0) in a first entry. The representative group pattern GP1 has the highest frequency. Therefore, as shown in a first row of the representative-group determination table shown in Fig. 44, the representative group pattern GP1 is registered correspondingly to a representative attention pattern of (0, 0, 0).

In step S122, it is determined whether the processing has been finished for all entries in the representative frequency table. When the processing has not yet been finished, the next entry is obtained in step S123 and the processing returns to step S121.

When the process of step S121 is finished for all entries, the processing is finished at step S122.

With the above-described processing, the representative-group determination table shown in Fig. 44 is generated from the representative frequency table shown in Fig. 43. The processing performed so far corresponds to the flow indicated by the solid lines in Fig. 47.

The group determination table shown in Fig. 40 is finally generated from the representative frequency table.

The group determination table includes all attention patterns. To generate the group determination table, the group pattern having the "relationship between the